Database for Social Good Project

There are many things going around us right now like the election, the Black Lives Matter movement, and the pandemic. We wanted to bring awareness to a unique issue that many of us have forgotten, homelessness. There is a huge prejudice that falls around the homeless population where people think that if they help out financially, the homeless issue will be resolved. That is not the case; many homeless struggle with mental illnesses, lack of job experience, health issues, and addiction. Psychologists have realized that in order to help these people one must invest in housing and shape them to become members of society and cities agree.

San Jose currently has a homeless population of 6,000 people, yet it is among one of the few hotspots for huge tech companies (Andrea Urton, ABC News). These companies have caused cities to become gentrified which has pushed out hundreds of low-income families and caused a rise in homelessness. Luckily, the City of San Jose has come up with a plan to help the homeless population by providing effective solutions to the issue. San Jose city leaders decided that they would spend 17 million dollars to build tiny homes for the homeless. As of right now San Jose has built enough homes to house 120 people a year (Andrea Urton, ABC News). Unfortunately, that is only 2% of the homeless population. Nevertheless, it is still a great start to helping the less fortunate. Since this tiny home project is aimed to help hundreds of homeless people get back on their feet there needs to be a database to track how many homeless people this project helps.

This project just launched in February 2020 which is why they are in need of database developers to create an efficient database to track progress. Who better to contact than Dr. Monges Database Design class!

Before we sign up for this project, we have to understand what services these tiny homes offer. The goal of this tiny home project is to offer temporary housing to homeless people for three to four months, with the hope that they will find permanent housing after that given time. There is a lot of money being invested into this project which is why the city wants to track its progress and success, this is where the developers come in. The developers should design a database that keeps track of every homeless person that has been given temporary housing and every person that has applied for housing. The reason we want to keep track of both is to see if they applied and were rejected due to limited capacity so that when a spot becomes available we can contact them. Although some people might be rejected due to their criminal record we still want to keep track of the application so the city can track these people.

Every person who applied to the program will have to fill out a set of questions which are essential to track progress. These questions include:

1. Do you have a previous record of drug use?
2. Do you have a criminal record?

The database will record those answers and the following:

1. All of the applicants information: name, age, gender, time being homeless, DOB, and date they applied (Including anything listed on application).
2. The number of people offered housing per year.
3. The number of people who were able to get jobs during the three to four month period.
4. The length of stay per person.

5. The number of people who were able to secure permanent housing.

The database is not as simple as tracking the information of every homeless person given housing. We want to also record how the city and specific organizations are helping. There wouldn't be housing if it weren't for the location and the people who are funding this project.
Therefore, we must also record:

1. The City or Organization or Individuals funding the Tiny Homes.
2. The total amount funded per year.
3. The amount of money that is funded every month.
4. The amount of housing each Tiny Home location can offer.
5. The location or address of each home.
6. The amount of beds filled and the amount empty or the capacity.

As of right now this is what we want to focus on. The database will grow as Cities open up more locations but we have to design an efficient and flexible database that will accommodate regardless of the growth of this project.

San Jose has found a tiny solution to a big problem and other cities are following. Los Angeles has also started plans to build tiny homes in Venice which will house 70 individuals every three to four months. If we are successful at correctly modeling the database for the San Jose Tiny House Project, Los Angeles could also use it.